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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,004	10/23/2000	YASUHIRO MIZUKOSHI	PNDF-00110	8994
466	7590	12/02/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			KADING, JOSHUA A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/694,004	Applicant(s) MIZUKOSHI, YASUHIRO	
	Examiner Joshua Kading	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-9 is/are allowed.
- 6) ☒ Claim(s) 10-12 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

5 (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent
10 granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Takeda et al. (U.S. Patent 6,128,316).

15 Regarding claim 10, Takeda discloses "a network system, comprising: a communication line having a predetermined bandwidth (figure 6 where each node is connected through a communication line and it is inherent that all communication lines have predetermined bandwidths); a terminal unit that is connected to said communication line and receives data through the communication line (figure 6, element
20 603); a first unit that couples said terminal unit through said communication line and routes data to be communicated between said terminal unit and said first unit (figure 6, element 602); and a second unit that sends data to said terminal unit through said first unit according to the bandwidth of said communication line that is estimated based on a data delay time of said communication line (figure 6, element 601 and figure 8 showing
25 node 814 containing a bandwidth acquiring means 809 as described in col. 22, lines 1-7 where the propagation delay is an equivalent to data delay time), wherein said second includes a table that outputs the estimated bandwidth of said communication line based

on an input that is the data delay time in said communication line (col. 20, lines 61-col. 21 lines 1-22 including Table 1)."

Claim Rejections - 35 USC § 103

5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

 Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. in view of Ott et al. (U.S. Patent 6,560,198 B1).

15 Regarding claim 11, Takeda discloses "a network system, comprising: a communication line having a predetermined bandwidth (figure 6 where each node is connected through a communication line and it is inherent that all communication lines have predetermined bandwidths); a terminal unit that is connected to said communication line and receives data through the communication line (figure 6, element
20 603); a first unit that couples said terminal unit through said communication line and routes data to be communicated between said terminal unit and said first unit (figure 6, element 602); and a second unit that sends data to said terminal unit through said first unit according to the bandwidth of said communication line that is estimated based on a data delay time of said communication line (figure 6, element 601 and figure 8 showing
25 node 814 containing a bandwidth acquiring means 809 as described in col. 22, lines 1-7 where the propagation delay is an equivalent to data delay time), wherein said second

unit includes a first table that indicates whether said communication line is a narrow band line based on inputs of the data delay time in said communication line (col. 20, lines 61-col. 21 lines 1-22 including Table 1 where the smaller bandwidth values in Table 1 for instance are narrow band relative to the other larger bandwidth values in the table)...”

However, Takeda lacks what Ott discloses, “...a round trip time of data between said first unit and said second unit” is further used to calculate the estimated bandwidth (col. 1, lines 48-51 where the round-trip time is used to directly effect the bandwidth of the network).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the round trip time for the purpose of managing the allocation of bandwidth in the network. The motivation for managing the bandwidth based on round-trip delay is so that, for instance, a connection having a long round-trip delay isn't given a large amount of bandwidth that it won't use, thus the system is maximizing resources.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. and Ott et al. as applied to claim 11 above, and further in view of Chen et al. (U.S. Patent 6,658,482 B1).

Regarding claim 12, Takeda and Ott disclose the system of claim 11. Takeda further discloses “wherein said second unit further includes a...table that outputs, when said first table indicates that said communication line is a narrow band line, a numerical estimate of the bandwidth of said communication line based solely on the data delay

time in said communication line (col. 20, lines 61-col. 21 lines 1-22 including Table 1)."

However, Takeda and Ott lack what Chen discloses, the table that outputs a numerical estimate of the bandwidth is a "second table" in the second unit (figure 8 where as seen the first table has pointers to next table that are used to output a final value or the first

5 table will output a final value, and although Chen does not have tables that output bandwidth estimates in response to input, the general principle of multiple table lookup is what Chen discloses and the contents of the tables are merely a matter of design choice). It would have been obvious to one with ordinary skill in the art at the time of invention to include the second table for the purpose of improving table lookup speeds
10 (Chen, col. 1, lines 27-47). The motivation for improving speeds is to increase the number of lookups to increase throughput.

Allowable Subject Matter

Claims 3-9 remain allowable.

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Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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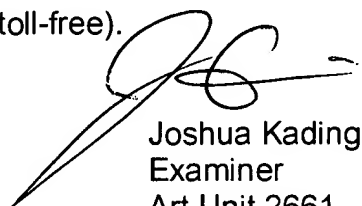
Response to Arguments

Applicant's arguments with respect to claims 10-12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

- 5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

- 10 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).
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Joshua Kading
Examiner
Art Unit 2661

November 18, 2004



BOB PHUNKULH
PRIMARY EXAMINER